

Ship Jan 31

Work Order ID 79378

\*79378\*

Page 1

Wednesday, January 25, 2012 11:50:15 AM

Item ID: D4434-045 Accept \*N900040100\* Setup Start \*NS1\*  
Revision ID: Stop \*NS2\*  
Item Name: Fwd Outboard Bracket Assembly  
Start Date: 1/25/2012 Start Qty: 1.00 \*1\* Cust Item ID:  
Required Date: 2/3/2012 Req'd Qty: 1.00 \*1\* Customer:  
Reference:

Approvals: Process Plan: ✓ Date: 12-01-25 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4434	A

100 0.00

\*100\*

Small Fab Memo 0.00  
Small Fab Assemble cover and bracket together as per dwg

PS 12/01/30 (1) PTO

110 QC5- Inspect part completeness to step on W/O 0.00

\*110\*

QC Memo 0.00  
Quality Control

S 12/01/30

70

120 Black Sandtex(Ref:4.3.5.7) per QSI005 4.3 0.00

\*120\*

Powdercoat Memo 0.00  
Powder Coating START TIME: 9:30  
OVEN TEMPERATURE: 320 OF  
FINISH TIME: 10:00

1X0 m-p 12/01/31

M 115128

W/O: 79378		79378 WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D4434-015 PAR #: \_\_\_\_\_ Fault Category: Small Part NCR: Yes No DQA 12/2/12 Date: 12/2/12  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: 12/3/12 Date: 12/3/12

NCR: 12-1169		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/6/13	100	1 part <u>D4434-5</u> at the counter sink hole was oversize R-C <del>process</del> operator error	S 12/6/13 05/12/12	Scrap & destroy No replace	S 12/6/13	S 12/6/13	S 12/6/13 05/12/12	S 12/6/13

NOTE: Date & initial all entries

**\*79378\***

Wednesday, January 25, 2012 11:50:15 AM

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**\*1\***

**Cust Item ID:**

**Start Date:** 1/25/2012      **Start Qty:** 1.00

**Required Date:** 2/3/2012      **Req'd Qty:** 1.00

**\* 1 \***

**Customer:**

**Reference:**

Run Start \*NR1\*

**Approvals:** \_\_\_\_\_ **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Stop \*NR2\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Accept Qty	Reject Qty	Reject Number	Insp. Stamp

### QC3- Inspect Part Finish

0.00

**\*130\***

QC

## Memo

0.00

## Quality Control

140

0.00

**\*140\***

### Small Fab

## Memo

0.00

## Small Fab

Install rubber seal as per dwg

150

QC5- Inspect part completeness to step on W/O

0.00

**\*150\***

QC

## Memo

0.00

## Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 79378****\*79378\***

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Wednesday, January 25, 2012 11:50:15 AM

Item ID: D4434-045 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Fwd Outboard Bracket Assembly  
Start Date: 1/25/2012 Start Qty: 1.00 **\*1\*** Cust Item ID:  
Required Date: 2/3/2012 Req'd Qty: 1.00 **\*1\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160		0.00							
<b>*160*</b>									
Packaging	Memo	0.00							
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
<b>*170*</b>									
QC	Memo	0.00							
Quality Control									

GA w/o 79380

SB 12/01/31

12/21/11

12/21/31

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Wednesday, January 25, 2012 11:50:19 AM

Page 1

Work Order ID: 79378

**\*79378\***

Parent Item: D4434-045

**\*D4434-045\***

Parent Item Name: Fwd Outboard Bracket Assembly

Start Date: 1/25/2012

Required Date: 2/3/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP revA 11.10.06 new issue EC verified by:DD IPP RevB  
11.12.22 per PA5 EC verified by:JLM IPP RevC 12.01.24 per  
REV.A DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4434-3		Manufactured	No			100	Each	0.0000	1	1			
<b>*D4434-3*</b>							B 79375		**	2		SO 12/01/30	
Bracket													
D4434-5		Manufactured	No			100	Each	2.0000	1	1			
<b>*D4434-5*</b>									**			SO 12/01/30	
Bracket													
					<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>						
					ENG	2	B 79376			2			
					78250	2							
D4441-1		Manufactured	No			100	f	35.4840	0.5	0.5			
<b>*D4441-1*</b>									**			SO 12/04/30	
Rubber Seal													
					<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>						
					prelim	35.484				5			
					74760	35.484							
Cut qty 1 to 6.0" long													
MS20426AD4-4		Purchased	No			100	Each	1,381.000	6	6			
<b>*MS20426AD4-4*</b>									**			EP 12/01/30	
Rivet													
					<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>						
					ST317	1381				6			
					116188	1381							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

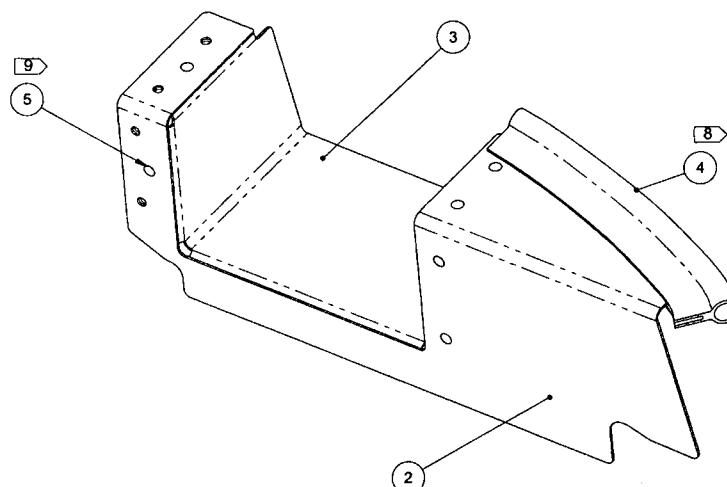
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



ITEM	QTY -045	PART NUMBER	DESCRIPTION
1	X	D4434-045	FWD OUTBOARD BRACKET ASSEMBLY
2	1	D4434-3	BRACKET
3	1	D4434-5	BRACKET
4	1	D4441-1-060	RUBBER SEAL
5	6	MS20426AD4-4	RIVET



**D4434-045 FWD OUTBOARD BRACKET ASSEMBLY**

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "BLACK SANDTEX" (4.3.5.7) PER DART QSI 005 4.3 MASK NUT PLATE HOLES
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.365 lbs
- 8) INSTALL RUBBER SEAL TO EDGE OF PART AFTER POWDER COAT USING 3M 1300/1300L ADHESIVE ENSURE BRACKET IS COMPLETELY INSERTED INTO GROOVE OF RUBBER SEAL IT IS ACCEPTABLE TO NOTCH THE SEAL AS REQUIRED TO PREVENT IT FROM BUCKLING
- 9) TRANSFER  $\varnothing 0.129$  HOLE 6 PLACES AND CSK TO  $\varnothing 0.225 \times 100^\circ$

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCO. 10-11-11  
SUBJECT: 10-11-11  
WORK NO. 10-11-11  
NO. 10-11-11

79378  
10-01-25

RELEASED  
2012-01-23

DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO. <b>D4434</b>	REV. A
MFG. APPR.	RF	SHEET 4 OF 15	
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	<b>COVER ASSEMBLY</b>	NTS
DATE	12.01.17	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

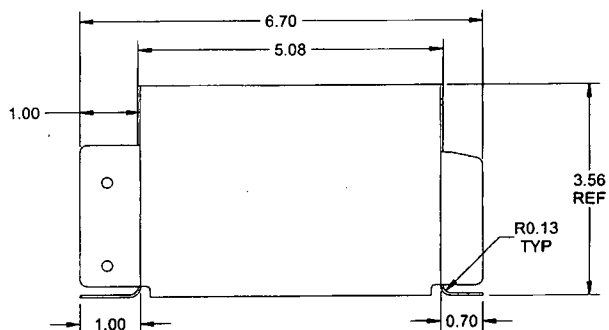
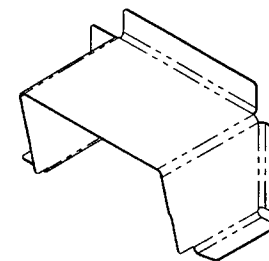
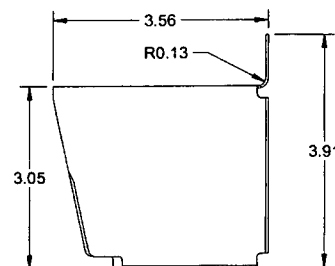
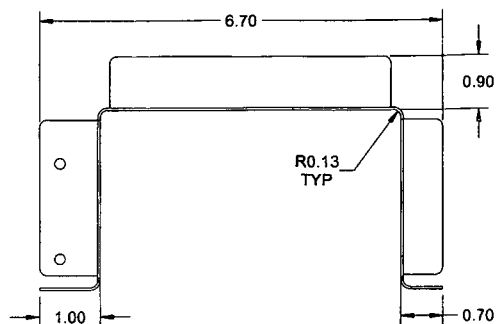
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



19378

# **D4434-5 BRACKET**

## **NOTES:**

- 1) MATERIAL: MAKE FROM D4434-5F FLAT PATTERN
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.19 lbs

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO. <b>D4434</b>	REV. A
MFG. APPR.	<i>[Signature]</i>	SHEET 10 OF 15	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>COVER ASSEMBLY</b>	NTS
DATE	12.01.17	<small>COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

RELEASED  
2012-01-23  
JMD

**Dart Aerospace Ltd**

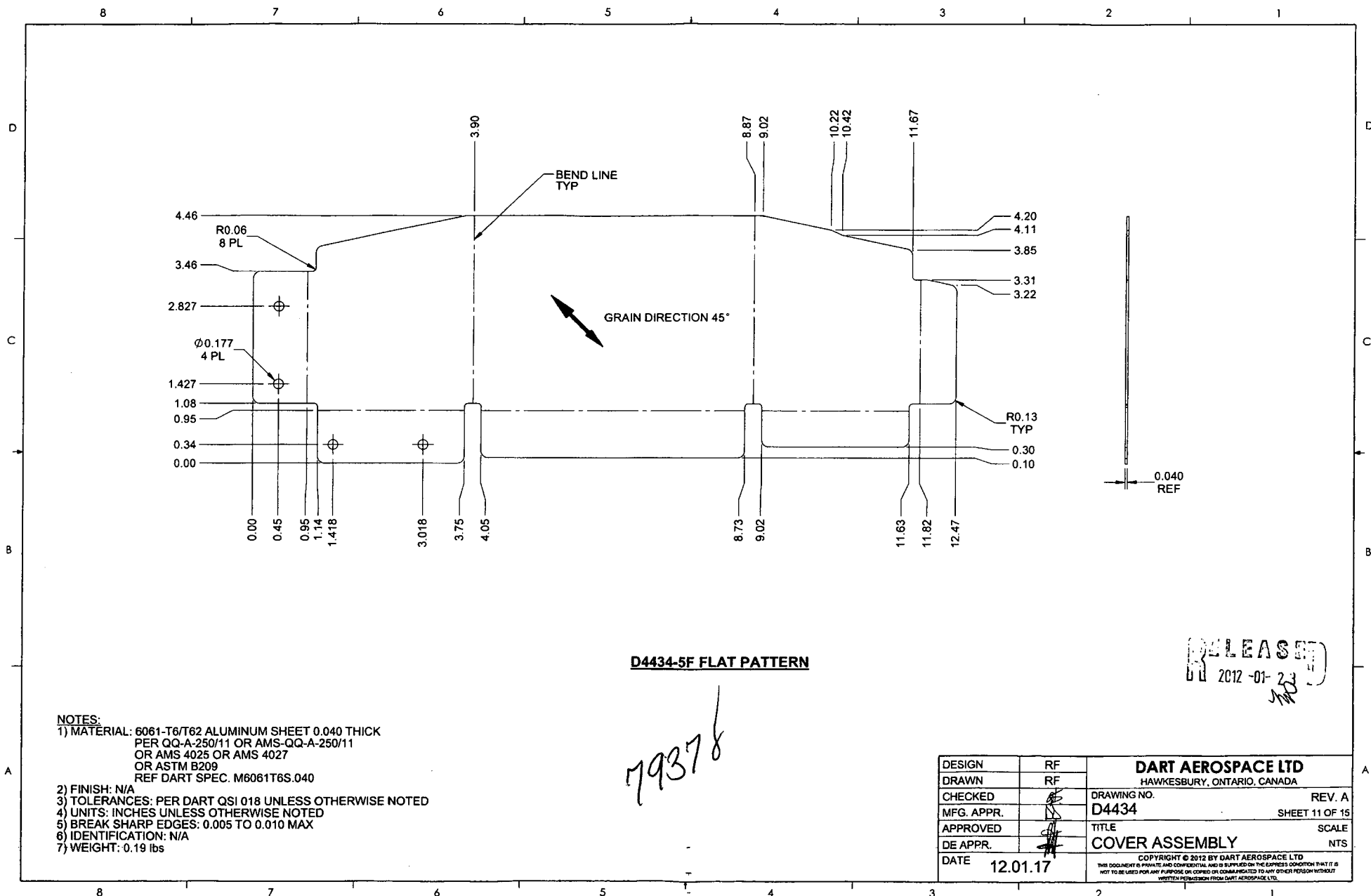
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries